

WHAT IS CLAIMED IS:

1. A flat panel display, comprising:

a gate line, a data line and a power supply line formed on an insulation substrate;

a pixel region defined by the gate line, the data line and the power supply line; and

a pixel comprising a pixel electrode arranged in the pixel region, the pixel electrode being

formed on the same layer as the power supply line.

2. The flat panel display of claim 1, the power supply line being formed on a layer different

from the gate line and data line.

3. The flat panel display of claim 1, the power supply line and pixel electrode both being

formed of the same material.

4. The flat panel display of claim 3; the power supply line and pixel electrode being formed

of a material having both a low resistivity and a high reflectivity.

5. The flat panel display of claim 4, the power supply line and the pixel electrode being

formed of a single film of a material being selected from the group consisting of Au, Pt, Ni, Cr, a

laminated Ni/Al/Ni film, a laminated Ag/ITO film and a laminated Al/ITO film.

1 6. A flat panel display, comprising:

2 a thin film transistor comprising source and drain electrodes, formed on an insulation
3 substrate;

4 an insulation film formed on the insulation substrate and on the thin film transistor, the
5 insulation film being perforated by first and second contact holes exposing the source and drain
6 electrodes respectively;

7 a pixel electrode formed on the insulation film and connected to one of the source and drain
8 electrodes through one of the first and second contact holes; and

9 a power supply layer formed on the insulation film and connected to the other one of the
10 source and drain electrodes through the other one of the first and second contact holes.

1 7. The flat panel display of claim 6, the power supply layer and pixel electrode being formed
2 of the same material.

1 8. The flat panel display of claim 6, the power supply layer and pixel electrode being formed
2 of a material having both a low resistivity and a high reflectivity.

1 9. The flat panel display of claim 7, wherein the pixel electrode and the power supply layer
2 being formed of a single film of a material selected from the group consisting of Au, Pt, Ni, Cr, a
3 laminated Ni/Al/Ni film, a laminated Ag/ITO film and a laminated Al/ITO film.

1 10. A flat panel display, comprising:

2 an insulation substrate divided into a plurality of pixel regions and comprising a plurality of
3 thin film transistors, each thin film transistor being arranged in corresponding ones of said plurality
4 of pixel regions;

5 an insulation film formed on the substrate;

6 a plurality of pixel electrodes formed on the insulation film and being electrically connected
7 to corresponding ones of said plurality of thin film transistors in corresponding ones of said plurality
8 of pixel regions; and

9 a power supply layer formed on the insulation film such that the power supply layer is
10 electrically separated from the plurality of pixel electrodes, said power supply layer being electrically
11 connected to each of the plurality of thin film transistors and supplying power to each of the plurality
12 of thin film transistors.

1 11. The flat panel display of claim 10, the power supply layer being formed in a grid shape
2 in which corresponding ones of said plurality of pixel electrodes being disposed in each grid.

1 12. The flat panel display of claim 10, the power supply layer being formed in a line shape
2 in which the power supply layer is arranged between corresponding ones of said plurality of pixel
3 electrodes, said power supply layer being arranged in one of a row or a column.

1 13. The flat panel display of claim 10, the power supply layer having a surface electrode

2 shape in which the power supply layer is formed on a whole surface of the substrate and being
3 electrically separated from each of the plurality of pixel electrodes.

1 14. A method of fabricating a flat panel display, comprising the steps of:

2 forming a thin film transistor comprising source and drain electrodes, the thin film transistor
3 being formed on an insulation substrate;

4 forming an insulation film on the substrate;

5 etching the insulation film to form a first and a second contact holes that perforate the
6 insulation film, said first and said second contact holes exposing the source and drain electrodes,
7 respectively of the thin film transistor;

8 depositing a pixel electrode material on the substrate; and

9 forming a pixel electrode electrically connected to one of the source and drain electrodes
10 through one of the first and second contact holes while simultaneously forming a power supply layer
11 electrically connected to the other one of the source and drain electrodes through the other one of the
12 first and second contact holes by depositing, patterning and etching the pixel electrode material.

1 15. The method of claim 14, the pixel electrode material being formed of a material whose
2 work function is 4.5 or more.

1 16. The method of claim 14, the pixel electrode material being formed of a material having
2 both a low resistivity and a high reflectivity.

1 17. The method of claim 14, the pixel electrode material being formed of a material being
2 selected from the group consisting of Au, Pt, Ni, Cr, a laminated Ni/Al/Ni film, a laminated Ag/ITO
3 film and a laminated Al/ITO film.